TX-NR709 7.2-CHANNEL NETWORK A/V RECEIVER

BLACK SILVER

Microphone for Audyssey

Get Connected with High-Performance Home Cinema

With its bountiful array of connections, the TX-NR709 A/V receiver handles just about any playback device you care to hook up. Eight HDMI® inputs give you plenty of scope for high-definition sources, while two HDMI outputs double your display options. HDMI supports pristine lossless audio from Dolby and DTS and video upscaling to stunning 4K resolution via Qdeo™ technology. Connectivity is further enhanced by a front-panel USB port for digital link-up of iPod/iPhone, and a wide range of analog and digital inputs—including S-Video and 7.1 analog multichannel inputs—for all your legacy components. The network-capable TX-NR709 also brings PC audio and internet radio to your living room, where Audyssey MultEQ® XT calibrates the soundfield to match the room's unique dimensions. Onkyo's graphical OSD and navigation GUI make it easy to browse your content and adjust settings on the fly. Finally, bi-amping capability, 7.2 multichannel pre-outs, and a dedicated phono input provide further flexibility for the demanding audiophile and help propel the TX-NR709 to the head of its class.

ADVANCED FEATURES

- THX® Select2 Plus™ Certified
- HDMI® Support for 3D, Audio Return Channel, DeepColor™, x.v.Color™, LipSync, Dolby® TrueHD, DTS-HD Master Audio™, DVD-Audio, Super Audio CD, Multichannel PCM, and CEC
- Three-Stage Inverted Darlington Circuitry
- HDMI Video Upscaling to 4K with Qdeo™ Technology by Marvell
- Direct Digital Connection of iPod/iPhone via Front-Panel USB Port
- Audyssey MultEQ® XT for Room Acoustic Correction
- Dolby® Volume for Reference-Quality Listening Experience at Any Volume
- Audyssey DSX™ and Dolby® Pro Logic® IIz for Expanded Surround Channels
- Playback of Audio Files Through Local Network (MP3, WMA, WMA Lossless, FLAC, WAV, Ogg Vorbis, AAC, LPCM)
- Internet Radio and Music Streaming Service Connectivity (vTuner, Last.fm*, Napster*)
- Color-Coded, 7.1 Multichannel Inputs
- Color-Coded, 7.2 Multichannel Pre Outs
- Bi-Amping Capability

* *Availability of services depends on region.*

AMPLIFIER FEATURES

- 170 W/Ch at 6 Ω, 1 kHz, 1%, 1 Channel Driven, IEC
- WRAT (Wide Range Amplifier Technology)
- H.C.P.S. (High Current Power Supply) Massive High-Power Transformer
- Linear Optimum Gain Volume Circuitry
- PLL (Phase Locked Loop) Jitter-Cleaning Circuit Technology for All Audio Signals

PROCESSING FEATURES

- Dolby® TrueHD and DTS-HD Master Audio™ Decoding
- TI Burr-Brown 192 kHz/24-Bit DACs (PCM1690) for All Channels
- Advanced 32-Bit Processing DSP Chip
- 4 DSP Modes for Gaming: Rock, Sports, Action, and RPG
- Advanced Music Optimizer for Compressed Digital Music Files
- Handles Playback of Mass Storage Class USB Memory
- Theater-Dimensional Virtual Surround Function
- Direct Mode and Pure Audio Mode
- Double Bass Function
- Non-Scaling Configuration
- A-Form Listening Mode Memory

CONNECTION FEATURES

- 8 HDMI® Inputs (1 Front/7 Rear) and 2 Outputs
- Universal Port for Onkyo Peripheral Devices Such as UP-A1 Dock for iPod/iPhone or UP-DT1 DAB+ Radio Tuner
- Component Video Switching (2 Inputs and 1 Output)
- 5 Composite Video Inputs (1 Front/4 Rear) and 2 Outputs
- 4 S-Video Inputs and 2 Outputs
- Analog RGB Video Input (D-sub, 15 pin) for PC
- 5 Digital Audio Inputs (2 Optical and 3 Coaxial)
- 6 Analog Audio Inputs and 1 Output
- Phono Input
- Powered Zone 2 and Zone 2 Line-Out for Distributed Audio Playback in Another Room
- Color-Coded, Banana Plug-Compatible Speaker Posts
- RS232 Port, IR Input, and 12 V Trigger Out (Zone 2)
- Headphone Jack

OTHER FEATURES

- Overlaid Graphical On-Screen Display (OSD) and GUI Navigation via HDMI
- Audyssey Dynamic EQ® for Loudness Correction
- Audyssey Dynamic Volume® to Maintain Optimal Listening Level and Dynamic Range
- Independent Crossover Adjustment for Each Channel (40/50/60/70/80/90/100/120/150/200 Hz)
- A/V Sync Control (Up to 800 ms in 5 ms Steps)
- Tone Control (Bass/Treble) for Front L/R Channels
- Illuminated Volume Knob (White)
- Light Dimming (Display: Normal/Dim/Dimmer; Volume Knob LED: On/Off)*
- RDS (PS/RT/PTY/TP)
- 40 FM/AM Random Presets
- Firmware Updates via Ethernet and USB
- Certified with Windows® 7 and DLNA Version 1.5
- RIHD (Remote Interactive over HDMI) for System Control
- Preprogrammed and Customizable RI Remote Control with On-Screen Setup, Mode-Key LEDs, and Macro Presets for Four Activities

* *Note: Volume knob LED is always off when display is dimmed.*

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HDMI® Support for 3D Video and Audio Return Channel

The eight HDMI inputs on the TX-NR709 let you connect multiple high-def sources, such as a Blu-ray player, a gaming console, and a cable/satellite tuner. Two HDMI outputs, on the other hand, let you send a pristine signal simultaneously to a pair of compatible high-resolution displays. The HDMI implementation on this receiver supports both 3D video and an Audio Return Channel, along with numerous high-resolution formats. 3D video brings exciting possibilities to home entertainment, with movie, game, and broadcast content on the increase and 3D-compatible TVs now on the market. Meanwhile, the Audio Return Channel allows audio content received directly by your HDTV's tuner to be sent "upstream" via HDMI to your A/V receiver, without the need for a separate S/PDIF audio cable.

Network Capability Delivers Internet Radio and Network Audio Streaming via Ethernet

As one of Onkyo's new breed of receivers that can link directly to the internet or to your home PC via a local network, the TX-NR709 takes streaming audio and internet radio to a whole new level. MP3, WMA, WMA Lossless, FLAC, WAV, Ogg Vorbis, AAC, and LPCM audio files can now be played back through your main system with unprecedented power and fidelity. The TX-NR709 also brings to life a huge array of internet radio channels from Last.fm* and vTuner, plus on-demand music streaming from Napster*. As well as being compatible with earlier platforms, the receiver is compatible with Microsoft's Windows® 7 platform, which includes the DLNA 1.5-specified "Play To" media-streaming feature. The TX-NR709's internet connectivity has the added benefit of making firmware updates simpler than ever.

**Availability of services depends on region.*

Direct Digital Connection of iPod/iPhone via Front-Panel USB Port

The TX-NR709's front-panel USB port lets you access MP3, WMA, WMA Lossless, FLAC, WAV, Ogg Vorbis, and AAC audio files stored on a USB flash drive or iPod/iPhone. As the audio signals are transported in digital form, rather than analog, there is much less chance of signal degradation. End result: your music sounds cleaner and more faithful to the original. A further benefit of the USB input is that it lets you use the system's remote controller to play back audio files on the connected device.

THX® Select2 Plus™ Certified

THX Select2 Plus certification is specified for rooms where the screen-to-seat viewing distance is 3 to 4 meters and the room volume is around 56 cubic meters. To achieve THX Select2 Plus certification, the TX-NR709 had to meet the world's most demanding standards for home cinema audio quality and performance, and play at reference volume levels with minimal distortion.

4K Video Upscaling and Processing via Qdeo™ Technology

The TX-NR709 offers full 4K (3840 x 2160) upscaling of standard video sources such as 480i/p, 720p, and 1080i/p. Interlaced-to-progressive conversion and scaling are performed by high-quality Qdeo technology from Marvell. Qdeo is a versatile video processor that uses algorithms designed to erase video noise and artifacts such as jaggies and feathering. Played back on a compatible wide-screen display, your Blu-ray Discs and DVDs will look more detailed and cinematic than ever.

PLL (Phase Locked Loop) Jitter-Cleaning Circuit Technology

Jitter is an unwanted side-effect of the digital-to-analog conversion process. Caused by fluctuations in the time domain of a digital signal, jitter has a detrimental impact on perceived audio quality. PLL jitter-cleaning circuit technology reduces jitter by comparing the input and output phases
of the digital signal and creating an accurate clock waveform. This enhances the precision of digital signal processing and noticeably improves audio quality. Jitter-cleaning technology works both for digital signals input via HDMI and for digital signals converted from analog signals inside the receiver itself.

Tailor Multichannel Audio to Your Home with Audyssey and Dolby Technologies

The TX-NR709 is equipped with Audyssey MultEQ® XT, an advanced room-correction technology with high-resolution filters for satellite speakers and subwoofers. MultEQ XT gathers frequency and time-domain measurements from up to eight positions in the listening area, to deliver a clear, well-balanced, and natural sound. Two other Audyssey technologies, Dynamic EQ® and Dynamic Volume®, work to optimize frequency response and dynamic range at all volume levels. In a similar vein, Dolby® Volume performs independent loudness adjustments to different frequencies and channels to produce a listening experience that includes all the dynamics of the original mix at whatever volume you choose. It also offers the option of maintaining playback volume at the same user-chosen level across all input sources.

Overlaid Graphical On-Screen Display and GUI Navigation

Changing the TX-NR709's settings is a seamless affair, thanks to the receiver's overlaid graphical on-screen display (OSD). Set-up menus appear overlaid on the video image you're watching, so you don't have to switch to a blank screen background. Meanwhile, a new GUI lets you smoothly navigate internet radio and iPod/iPhone contents. The OSD and GUI both operate over HDMI, making excellent use of that versatile interface.

SPECIFICATIONS

Amplifier Section

Power Output	
Front L/R	170 W/Ch (6 Ω, 1 kHz, 1%, 1 channel driven, IEC)
Center	170 W (6 Ω, 1 kHz, 1%, 1 channel driven, IEC)
Surround L/R	170 W/Ch (6 Ω, 1 kHz, 1%, 1 channel driven, IEC)
Surround Back L/R, Front High L/R, Front Wide L/R, or Zone 2 L/R	170 W/Ch (6 Ω, 1 kHz, 1%, 1 channel driven, IEC)
Dynamic Power	250 W (3 Ω, Front) 220 W (4 Ω, Front) 130 W (8 Ω, Front)
THD+N (Total Harmonic Distortion + Noise)	0.08% (20 Hz–20 kHz, Half power)
Damping Factor	60 (Front, 1 kHz, 8 Ω)
Input Sensitivity and Impedance	200 mV/47 kΩ (Line) 2.5 mV/47 kΩ (Phono MM)
Rated RCA Output Level and Impedance	200 mV/470 Ω (Pre out)
Maximum RCA Output Level and Impedance	4.6 V/470 Ω (Pre out)
Phono Overload	70 mV (MM, 1 kHz, 0.5%)
Frequency Response	5 Hz–100 kHz/+1 dB, -3 dB (Direct mode)
Tone Control	±10 dB, 50 Hz (Bass) ±10 dB, 20 kHz (Treble)
Signal-to-Noise Ratio	106 dB (Line, IHF-A) 80 dB (Phono MM, IHF-A)
Speaker Impedance	4 Ω–16 Ω or 6 Ω–16 Ω

Video Section

Input Sensitivity/Output Level and Impedance	
Video	1.0 Vp-p/75 Ω (Component and S-Video Y)
	0.7 Vp-p/75 Ω (Component PB/CB, PR/CR)
	0.25 Vp-p/75 Ω (S-Video C)
	1.0 Vp-p/75 Ω (Composite)
Component Video Frequency Response	5 Hz–100 MHz/0 dB, -3 dB

Tuner Section

Tuning Frequency Range	
FM	87.5 MHz–108 MHz
AM	522 kHz–1,611 kHz 530 kHz–1,710 kHz
FM/AM Preset Memory	40 stations

General

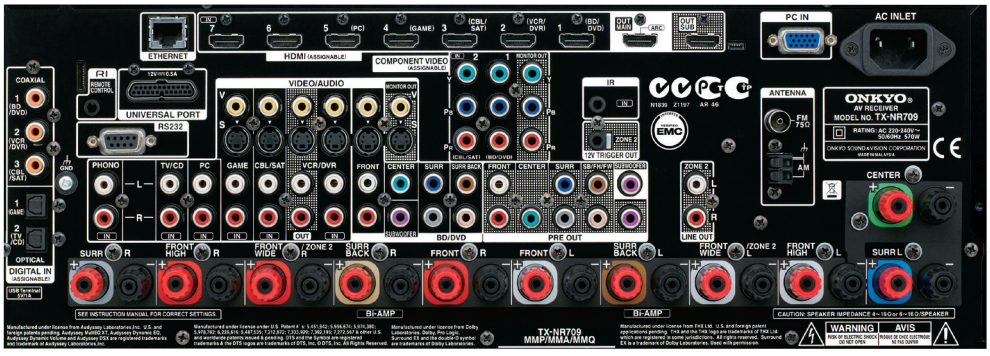
Power Supply	AC 220–240 V~, 50/60 Hz
Power Consumption	570 W
Dimensions (W x H x D)	435 x 174 x 379 mm
Weight	12.2 kg

CARTON

Dimensions (W x H x D)	570 x 298 x 469 mm
Weight	16.2 kg

Supplied Accessories

• Indoor FM antenna • AM loop antenna • Speaker cable labels
• Speaker set-up microphone • Instruction manual
• Quick set-up guide • Remote controller • AA (R6) batteries x 2



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ONKYO
Onkyo Sound&Vision Corporation 2-1 Nisshin-cho, Neyagawa-shi, Osaka 572-8540, JAPAN Tel: +81-72-831-8136 Fax: +81-72-833-5222 http://www.onkyo.com/
Onkyo Europe Electronics GmbH Liegnitzerstrasse 6, 82194 Groebenzell, GERMANY Tel: 49-8142-4401-0 Fax: 49-8142-4401-555 http://www.eu.onkyo.com/
Onkyo Europe Electronics GmbH (UK Branch) The Coach House, 81A High Street, Marlow, Buckinghamshire SL7 1AB, UNITED KINGDOM Tel: +44(0)1628-473350 Fax: +44(0)1628-401700
http://www.onkyo.co.uk/